

What is claimed is:

1. A rack for electrical equipment comprising:

a base including access apertures for receiving wires therethrough and mounting apertures for securing the base to a floor upon which the rack is mounted;

a pair of vertically extending upright members having lower ends secured to opposite sides of the base, each upright member having a web, opposing first and second flanges projecting from the web, and openings for mounting electrical equipment thereon;

a cross member extending between upper ends of the upright members;

separate flange reinforcing plates secured flat against interior surfaces of the flanges of the upright members and extending vertically from the lower ends of the upright members.

2. A rack as set forth in claim 1, wherein the reinforcing plates are attached to the flanges by welding.

3. A rack as set forth in claim 1, wherein each of the reinforcing plates extends about one-fifth the height of the upright members.

4. A rack as set forth in claim 1, wherein at least a portion of one of the flanges of the upright members tapers towards the web from the lower ends of the upright members.

5. A rack as set forth in claim 1, wherein the second flanges of the upright members each includes a lower portion extending upwardly from the lower end of the upright member, an upper portion extending downwardly from the upper end of the upright member, and a tapered portion tapering towards the web between the lower and the upper portions.

6. A rack as set forth in claim 1, wherein each of the upright members further comprises a lip extending opposite the web from one of the first and the second flanges.
7. A rack as set forth in claim 1, further comprising at least one brace secured to the cross-member and extending through the web of each upright member, and secured to one of the flanges of each upright member.
8. A rack as set forth in claim 7, wherein the cross member comprises a web and first and second flanges extending downwardly from the web of the cross member, and wherein the at least one brace is secured to interior surfaces of the first flanges of the cross member and the upright members.
9. A rack as set forth in claim 1, wherein the base comprises a bottom plate, an end wall extending upwardly from the bottom plate, and a top wall extending horizontally from the end wall above the bottom plate.
10. A rack as set forth in claim 9, wherein the mounting apertures of the base are located in the bottom plate, and the top wall includes access opening positioned over the mounting apertures.
11. A rack as set forth in claim 9, wherein the bottom plate includes cut-outs accommodating the upright members, such that the lower ends of the upright members are unobstructed.
12. A rack as set forth in claim 1, wherein the base includes a bottom plate, side channels extending at an angle between the bottom plate and the webs of the upright members, and a central channel extending horizontally between the side channels.

13. A rack as set forth in claim 12, wherein the base further includes angled inserts including vertical sections positioned against the upright members and horizontal sections positioned against the bottom plate, and wherein the side channels extend at an angle between the vertical and horizontal portions of the angle inserts.

14. A rack for electrical equipment comprising:

a base including access apertures for receiving wires therethrough and mounting apertures for securing the base to a floor upon which the rack is mounted;

a pair of vertically extending upright members having lower ends secured to opposite sides of the base, each upright member having a web, opposing first and second flanges projecting from the web, and openings for mounting electrical equipment thereon;

a cross member extending between upper ends of the upright members; and

wherein at least a portion of one of the flanges of the upright members tapers towards the web from the lower ends of the upright members.

15. A rack as set forth in claim 14, wherein the second flanges of the upright members each includes a lower portion extending upwardly from the lower end of the upright member, an upper portion extending downwardly from the upper end of the upright member, and a tapered portion tapering towards the web between the lower and the upper portions.

16. A rack as set forth in claim 14, wherein each of the upright members further comprises a lip extending opposite the web from one of the first and the second flanges.

17. A rack as set forth in claim 14, further comprising at least one brace secured to the cross-member and extending through the web of each upright member, and secured to one of the flanges of each upright member.

18. A rack as set forth in claim 17, wherein the cross member comprises a web and first and second flanges extending downwardly from the web of the cross member, and wherein the at least one brace is secured to interior surfaces of the first flanges of the cross member and the upright members.

19. A rack as set forth in claim 14, wherein the base comprises a bottom plate, an end wall extending upwardly from the bottom plate, and a top wall extending horizontally from the end wall above the bottom plate.

20. A rack as set forth in claim 19, wherein the mounting apertures of the base are located in the bottom plate, and the top wall includes access opening positioned over the mounting apertures.

21. A rack as set forth in claim 19, wherein the bottom plate includes cut-outs accommodating the upright members, such that the lower ends of the upright members are unobstructed.

22. A rack as set forth in claim 14, wherein the base includes a bottom plate, side channels extending at an angle between the bottom plate and the webs of the upright members, and a central channel extending horizontally between the side channels.

23. A rack as set forth in claim 22, wherein the base further includes angled inserts including vertical sections positioned against the upright members and horizontal sections positioned against the bottom plate, and wherein the side channels extend at an angle between the vertical and horizontal portions of the angle inserts.

24. A rack for electrical equipment comprising:

a base including access apertures for receiving wires therethrough and mounting apertures for securing the base to a floor upon which the rack is mounted;

a pair of vertically extending upright members having lower ends secured to opposite sides of the base, each upright member having a web, opposing first and second flanges projecting from the web, and openings for mounting electrical equipment thereon;

a cross member extending between upper ends of the upright members; and

at least one brace secured to the cross-member and extending through the web of each upright member, and secured to one of the flanges of each upright member.

25. A rack as set forth in claim 24, wherein the cross member comprises a web and first and second flanges extending downwardly from the web of the cross member, and wherein the at least one brace is secured to interior surfaces of the first flanges of the cross member and the upright members.

26. A rack as set forth in claim 24, wherein each of the upright members further comprises a lip extending opposite the web from one of the first and the second flanges.

27. A rack as set forth in claim 24, wherein the base comprises a bottom plate, an end wall extending upwardly from the bottom plate, and a top wall extending horizontally from the end wall above the bottom plate.

28. A rack as set forth in claim 27, wherein the mounting apertures of the base are located in the bottom plate, and the top wall includes access opening positioned over the mounting apertures.

29. A rack as set forth in claim 27, wherein the bottom plate includes cut-outs accommodating the upright members, such that the lower ends of the upright members are unobstructed.

30. A rack as set forth in claim 24, wherein the base includes a bottom plate, side channels extending at an angle between the bottom plate and the webs of the upright members, and a central channel extending horizontally between the side channels.

31. A rack as set forth in claim 30, wherein the base further includes angled inserts including vertical sections positioned against the upright members and horizontal sections positioned against the bottom plate, and wherein the side channels extend at an angle between the vertical and horizontal portions of the angle inserts.

32. A rack as set forth in claim 24, wherein the at least one brace comprises two braces.

33. A rack as set forth in claim 32, wherein each brace has a length equal to at least one quarter a length of the cross member.

34. A rack for electrical equipment comprising:

a base including access apertures for receiving wires therethrough and mounting apertures for securing the base to a floor upon which the rack is mounted;

a pair of vertically extending upright members having lower ends secured to opposite sides of the base, each upright member having a web, opposing first and second flanges projecting from the web, and openings for mounting electrical equipment thereon;

a cross member extending between upper ends of the upright members; and

wherein the base includes a bottom plate, side channels extending at an angle between the bottom plate and the webs of the upright members, and a central channel extending horizontally between the side channels.

35. A rack as set forth in claim 34, wherein the base further includes angled inserts including vertical sections positioned against the upright members and horizontal sections positioned against the bottom plate, and wherein the side channels extend at an angle between the vertical and horizontal portions of the angle inserts.

36. A rack as set forth in claim 34, wherein each of the upright members further comprises a lip extending opposite the web from one of the first and the second flanges.

37. A rack as set forth in claim 34, wherein the base comprises a bottom plate, an end wall extending upwardly from the bottom plate, and a top wall extending horizontally from the end wall above the bottom plate.

38. A rack as set forth in claim 37, wherein the mounting apertures of the base are located in the bottom plate, and the top wall includes access opening positioned over the mounting apertures.

39. A rack as set forth in claim 37, wherein the bottom plate includes cut-outs accommodating the upright members, such that the lower ends of the upright members are unobstructed.

40. A rack for electrical equipment comprising:

a base including access apertures for receiving wires therethrough and mounting apertures for securing the base to a floor upon which the rack is mounted;

a pair of vertically extending upright members having lower ends secured to opposite sides of the base, each upright member having a web, opposing first and second flanges projecting from the web, and openings for mounting electrical equipment thereon, wherein at least a portion of one of the flanges of each of the upright members tapers towards the web from the lower ends of the upright members;

separate flange reinforcing plates secured flat against interior surfaces of the flanges of the upright members and extending vertically from the lower ends of the upright members;

a cross member extending between upper ends of the upright members;

at least one brace secured to the cross-member and extending through the web of each upright member, and secured to one of the flanges of each upright member;

side channels extending at an angle between the base and the webs of the upright members; and

a central channel extending horizontally between the side channels.

41. A rack as set forth in claim 40, wherein the reinforcing plates are attached to the flanges by welding.

42. A rack as set forth in claim 40, wherein each of the reinforcing plates extends about one-fifth the height of the upright members.

43. A rack as set forth in claim 40, wherein the second flanges of the upright members each includes the tapered portion, a lower portion extending upwardly from the lower end of the upright member to the tapered portion, an upper portion extending downwardly from the upper end of the upright member to the tapered portion, and the tapered portion tapers towards the web from the lower portion to the upper portion.

44. A rack as set forth in claim 40, wherein each of the upright members further comprises a lip extending opposite the web from one of the first and the second flanges.

45. A rack as set forth in claim 40, wherein the cross member comprises a web and first and second flanges extending downwardly from the web of the cross member, and wherein the at least one brace is secured to interior surfaces of the first flanges of the cross member and the upright members.

46. A rack as set forth in claim 40, wherein the base comprises a bottom plate, an end wall extending upwardly from the bottom plate and a top wall extending horizontally from the end wall above the bottom plate, wherein the mounting apertures of the base are located in the bottom plate, and the top wall includes access opening positioned over the mounting apertures.

47. A rack as set forth in claim 40, wherein the base includes cut-outs accommodating the upright members, such that the lower ends of the upright members are unobstructed.

48. A rack as set forth in claim 40, further comprising angled inserts including vertical sections positioned against the upright members and horizontal sections positioned against the base, and wherein the side channels extend at an angle between the vertical and horizontal portions of the angle inserts.